AMENDMENT

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

WHAT IS CLAIMED IS:

1. (Currently Amended) A plasma processing apparatus comprising:

a chamber ~~having~~ defining at least one opening and constructed for retaining a generated~~ing~~ plasma;

a dielectric member ~~provided~~ positioned to sealingly cover the at least one opening ~~air-tightly~~;

at least one wave guide provided ~~in the~~ exteriorly of the chamber such that one end side thereof opposes the dielectric member, wherein the at least one wave guide defines a homogeneous internal volume;

an electromagnetic wave source ~~provided on~~operatively coupled to the other end side of the at least one wave guide;

a plurality of holes defined by a side ~~provided on a plane~~ of the at least one wave guide that is in opposition~~, the plane opposing~~ to the dielectric member; and

hole area adjusting means ~~having~~including a reciprocatable plate portion provided in at least one of the plurality of holes ~~so as~~ to adjust the opening area of the hole~~, said hole area adjusting means uniforming~~ and thereby modulate the density of plasma generated in said chamber during operation thereof~~by reciprocating said plate-like portion and adjusting the opening area of said hole~~.

2. (Original) A plasma processing apparatus according to claim 1, wherein the hole having the hole area adjusting means has a larger hole area than the areas of the other holes.

3. (Original) A plasma processing apparatus according to claim 2, wherein the hole having the largest hole area is located on the terminal end side of the wave guide.

4. (Original) A plasma processing apparatus according to claim 1, wherein the wave guide includes a plurality of wave guides.

5. (Original) A plasma processing apparatus according to claim 1, wherein at least one of the holes is located near the periphery of the dielectric member.

6. (Currently Amended) A plasma processing apparatus according to claim 1, wherein the wave guide has a rectangular cross-sectional shape, the hole has four sides of a ~~rectangle-like~~rectangular shape, the dielectric member has four sides of a ~~rectangle-like~~rectangular shape, and wherein the long sides of the hole are parallel to one side of the dielectric member close thereto.

7. (Original) A plasma processing apparatus according to claim 1, wherein the hole area of the hole on the side wall surface side of the chamber is made the largest, and wherein the hole is provided with the hole area adjusting means.

8. (Original) A plasma processing apparatus according to claim 1, wherein the hole area adjusting means is provided with a metal plate-like portion so as to adjust the

opening area of the hole by reciprocating the plate-like portion.

9. (Currently Amended) A plasma processing apparatus comprising:

a chamber having chamber wall surfaces, defining at least one opening and constructed for retaining a generated~~ing~~ plasma;

a dielectric member ~~provided~~ positioned to sealingly cover the at least one opening ~~air-tightly~~ and having four sides ~~of~~ forming a ~~rectangle-like~~generally rectangular shape;

at least one wave guide having a generally rectangular cross_-section~~al shape~~ and provided ~~in the~~ exteriorly of the chamber so as to oppose the dielectric member, wherein the at least one wave guide defines a homogeneous internal volume; and

a plurality of holes ~~provided on a plane of~~formed in the at least one wave guide, ~~the plane opposing~~positioned to oppose the dielectric member~~;~~ ~~and~~

wherein the area of the holes ~~on~~ adjacent to the sides of the chamber wall surface ~~is made~~are larger than those of the other holes.

10. (Currently Amended) A plasma processing apparatus comprising:

a chamber ~~having~~ defining at least one opening and constructed for retaining a generated~~ing~~ plasma;

a dielectric member ~~provided~~ positioned to sealingly cover the at least one opening ~~air-tightly~~ and having four sides ~~of~~ forming a ~~rectangle-like~~generally rectangular shape;

at least one wave guide having a generally rectangular cross_-section~~al shape~~ and provided ~~in the~~ exteriorly of the chamber so as to oppose the dielectric member, wherein the at least one wave guide defines a homogeneous internal volume; and

at least one hole having ~~four sides of a rectangle like~~a generally rectangular ~~shape~~ cross section, and formed in the at least one wave guide and ~~provided~~ positioned to oppose the dielectric member~~,~~; ~~and~~

wherein one side of the at least one hole is parallel to ~~one of hole is parallel to~~ one side of the dielectric member.

11. (Currently Amended) A plasma processing apparatus according to claim 10, comprising at least one hole located near one of two sides adjoining each other of the dielectric member and at least one hole located near the other of the two sides, wherein ~~the~~ long sides of the hole located near the one of the two sides are parallel to the one, and wherein the long sides of the hole located near the other of the two sides are parallel to the other.

12. (Currently Amended) A plasma processing apparatus comprising:

a chamber ~~having~~ defining at least one opening and constructed for retaining a generate~~ding~~d plasma;

a dielectric member ~~provided~~ positioned to sealingly cover the at least one opening ~~air-tightly~~;

at least one wave guide defining a homogeneous internal volume and provided so as to oppose the dielectric member;

a microwave oscillator ~~connected~~ operatively coupled to the at least one wave guide; and

a plurality of holes ~~provided on a plane~~defined by a side of the at least one wave guide~~, the plane opposing~~ that is in opposition to the dielectric member~~,~~; ~~and~~

wherein at least some of the holes have areas greater than other holes, and wherein the holes having a greater area are generally more distant from ~~the farther the holes are from~~ the microwave oscillator than the other holes closer

to the microwave oscillator~~, the larger the areas of the holes are made~~.

13. (Currently Amended) A plasma processing apparatus comprising:

a chamber ~~having~~ defining at least one opening and constructed for retaining a generated~~ing~~ plasma;

a dielectric member ~~provided~~ positioned to sealing cover the at least one opening ~~air-tightly~~;

at least one wave guide defining a homogeneous internal volume and provided so as to oppose the dielectric member;

a microwave oscillator ~~connected~~ operatively coupled to the at lease one wave guide; and

a plurality of holes ~~provided on a plane~~ defined by a side of the at least one wave guide~~, the plane opposing~~ that is in opposition to the dielectric member~~; and~~

wherein intervals between the plurality of holes are equal to half the wavelength of the microwave.